

From the SNM PET Center of Excellence

In 2009 the PET Center of Excellence (PET CoE) implemented several exciting programs for the PET/CT community, including a webinar series about PET, molecular imaging, and clinical trials. This series, “Molecular Imaging Concepts and Practices,” launched in November, brings together experts from the PET CoE, the Molecular Imaging Center of Excellence, and the Clinical Trials Network to provide a brief, 1-h webinar each month. The series will continue through June 2010. The PET CoE also launched the PET E-library and PET E-community, member benefits designed to allow PET CoE members to ask and answer questions, post comments, post and review images, and provide updates/information to the PET COE community regarding PET and PET/CT.

In 2007 when the PET CoE created the PET Utilization Task Force (PET UTF), a mere 12-member group, the goals were small and potential outcomes were undetermined. Only 2 y later, the PET UTF has far exceeded many expectations. Now a 35-plus-member task force, the PET UTF has created a comprehensive program, PET Professional Resources and Outreach Source (PET PROS), geared toward educating professionals involved in PET/CT in various ways. The PET PROS program contains specific information to help referring and interpreting physicians, technologists, and industry representatives understand and appreciate the potential of PET/CT when used appropriately. The PET PROS program includes the following features: practice guideline summaries, elements of PET/CT reporting guidelines, PET/CT educational brochures, fact sheets for patients, an online collection of PET/CT

application PowerPoint presentations, and a cost effectiveness e-library and reimbursement survey. Last month the PET PROS program launched a Payer Relations Kit that includes information on charges allowed for PET/CT, instructions for reporting, and tips on handling denials and contacting payers. After the third strategic planning meeting in as many years, we are pleased to report that response to the PET PROS program has been overwhelmingly positive. The program will continue to grow over the next year.

One of the most important initiatives of the PET CoE has been the increased focus on cost effectiveness research. In fall 2009, the PET CoE submitted on behalf of SNM a proposal to the Agency for Healthcare Research and Quality (AHRQ) for conference support (R13). This funding mechanism supports conferences that will help to further the AHRQ mission to improve the quality, safety, efficiency, and effectiveness of health care. The expected outcome of this workshop will be a summary of findings, which will serve as a guide for the medical imaging field and the comparative effectiveness research/health services community.



George M. Segall, MD

*George M. Segall, MD
President, PET Center of Excellence*

From the SNM Academic Council

The SNM Academic Council is dedicated to the scientific interchange of ideas among SNM members who have an interest in training and education in nuclear medicine. Our mission is to promote expertise in the training of graduates and undergraduates in nuclear medicine, which also involves mentoring and leadership training. We provide a forum for discussion of issues and problems of mutual interest and concern to the nuclear medicine community. This includes assisting nuclear medicine residency program directors in fulfilling regulations of the Accreditation Council of Graduate Medical Education (ACGME) and alerting program directors to changes in board and credentialing requirements.

At the 2009 SNM Mid-Winter Meeting, the Academic Council cosponsored 4 sessions with the American College of Nuclear Physicians: 2 on leadership (1 by Hossein Jadvar, MD, PhD, MPH, MBA; and 1 by Jay Harolds, MD); a session on maintenance of certification by Leonie Gordon, MD; and a session on attracting residents to nuclear medicine by Michael Graham, MD, PhD.

The Academic Council sponsored 2 sessions at the Association of University Radiologists (AUR) annual



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meeting, for the purpose of promoting closer collaboration between program directors in nuclear medicine and radiology. The AUR meeting is the only meeting in imaging devoted to education. A session by Steve Karesh, PhD, on “Radiation Safety, Radiopharmacy, and Update on NRC Regulations” was geared toward senior radiology residents preparing for the American Board of Radiology oral certifying exam. The other session was on cardiac PET, SPECT, MR, and CT imaging.

At the 2009 SNM Annual Meeting, the Academic Council sponsored or cosponsored 4 sessions. The Tom Miller Memorial Lecture was given by Darlene Metter, MD, and Henry Royal, MD, on lifelong learning. The Hal Anger Memorial Lecture, “The Evolution of SPECT/CT to Clinical Practice,” sponsored by the Academic Council, was presented by James Patton, PhD, and was cosponsored by the Computer and Instrumentation Council and the Education and Research Fund. A session sponsored by the ACGME and cosponsored by the Academic Council was given by Metter and Missy Fleming, PhD, on “Navigating the ACGME Website.” The fourth session was given by the National Institute of Biomedical Imaging and Bioengineering/National Institutes of Health and cosponsored by the Academic Council on “Introduction to Molecular Biology.” At the

business meeting during the SNM Annual Meeting, we presented the Lifetime Achievement Award to Harolds.

We have successfully implemented the intern program in our Council, and Myo Min Han, MD, has been doing an excellent job.

The Academic Council submitted comments to the ACGME regarding proposed changes in resident duty hour requirements and sent Metter as SNM representative to the ACGME Congress on Duty Hours. The Academic Council also submitted comments in response to the proposed changes to the nuclear medicine curriculum by the Nuclear Medicine Residency Review Committee of the ACGME. One of the issues on which we commented was the inclusion of a greater degree of molecular imaging in the required curriculum, as we believe that molecular imaging will play an increasingly important role in nuclear medicine in the future. The other issue was the amount of CT training required in nuclear medicine programs. Training in CT is vital to understanding and interpreting PET/CT and SPECT/CT studies. The amount of CT training has become a controversial issue, and it will be interesting to see how this evolves.

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From the SNM Brain Imaging Council

The SNM Brain Imaging Council (BIC) exists to foster and develop clinical and research applications of nuclear brain imaging. This is achieved through organizing research symposia, sponsoring educational courses, and supporting the society in developing policy positions for brain imaging applications and training. In addition, the BIC seeks to foster connections among council members and help identify and meet educational, clinical, and research needs for advancing nuclear brain imaging. The primary activity of the BIC has been around development of categorical seminars and continuing education courses at the SNM Annual Meeting. Anissa Abi-Dargham, MD, organized a categorical seminar for the 2009 meeting in Toronto that provided a critical review of molecular imaging in neuropsychiatry and was well attended.

It is an exciting time to be in the field of molecular imaging of the brain, with clinical applications in neurodegenerative disorders set to soar in the foreseeable future. For example, a dopamine transporter radioligand may become available in the United States for a proposed indication of SPECT detection of loss of functional nigrostriatal dopaminergic neurons in patients presenting with symptoms or signs suggestive of dopaminergic neurodegeneration. Presynaptic nigrostriatal dopaminergic denervation is a key pathobiologic mechanism of Parkinson disease. DaTSCAN (ioflupane, ^{123}I -FP-CIT; GE Healthcare) has

been available in Europe since 2000 and has been used in more than 200,000 patients in 32 countries. Dopamine transporter imaging will fill a vacant clinical niche in neuronuclear medicine in the United States, and the BIC will assist with the formulation of future procedure guidelines. Another exciting development in the area of molecular imaging has been the recent development of β -amyloid radiopharmaceuticals that can detect Alzheimer disease before the onset of dementia and reliably distinguish Alzheimer disease from frontotemporal dementia. Several companies have committed to the development of an ^{18}F - β -amyloid ligand with phase II and III trials underway.

The BIC recognizes the contributions of senior scientists who have made pioneering advances in the field through the annual Kuhl–Lassen award and lecture. Chester A. Mathis, PhD, from the University of Pittsburgh, was honored with the 2009 award for his pioneering work in the development of β -amyloid imaging.

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